

Application No. 10/559,774
Art Unit: 1796

Amendment under 37 C.F.R. §1.111
Attorney Docket No. 053444

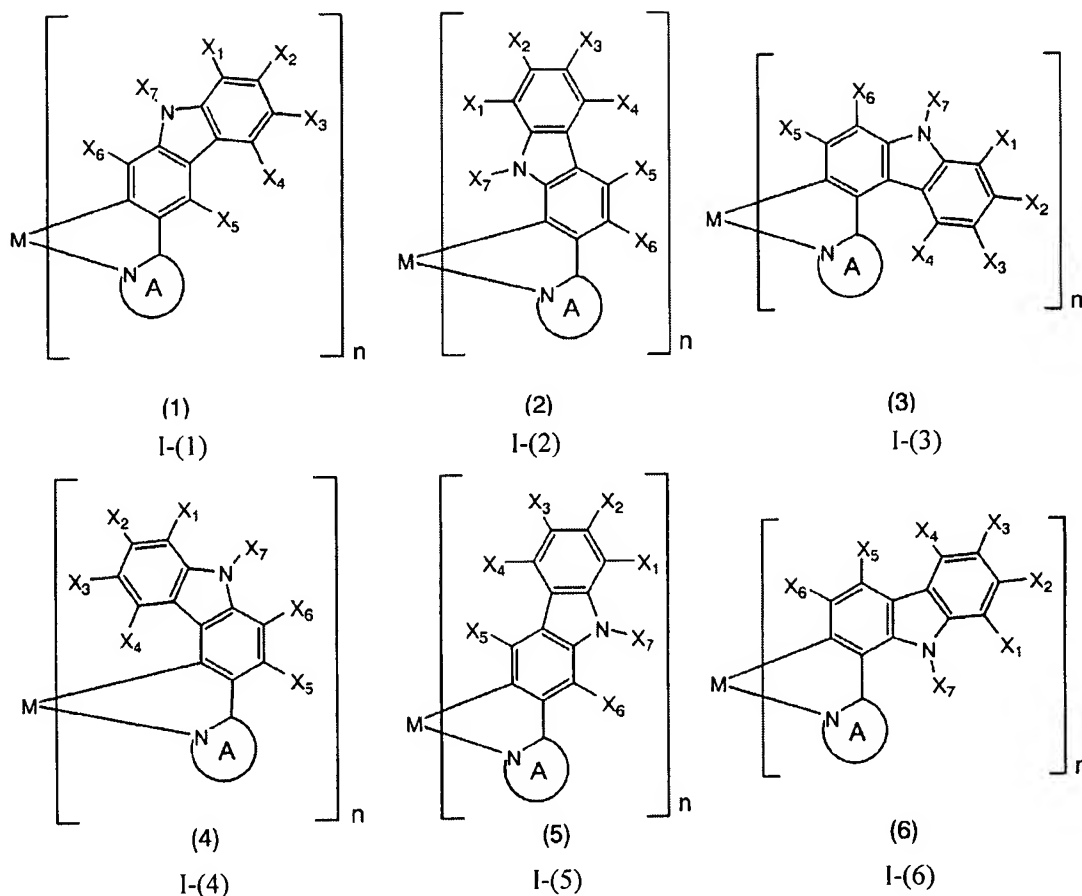
AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Listing of Claims

Claim 1 (Cancelled)

Claim 2 (Currently amended): A ~~[[The]]~~ metal coordination compound ~~according to~~
~~Claim 1, wherein it is~~ represented by any one of Formulae I-(1) to I-(6),



(in the formulae, M is Ir, Rh, Ru, Os, Pd, or Pt, and \underline{n} is 2 or 3; when M is Ir, Rh, Ru, or Os and \underline{n} is 2, another bidentate ligand further bonds to M; ring A is a cyclic compound containing a nitrogen atom bonded to M; X₁ to X₇ may be any of a hydrogen atom, a halogen atom, a cyano group, a nitro group, a C1 to C22 straight-chain, cyclic, or branched alkyl group or a corresponding halogen-substituted alkyl group in which a part or all of the hydrogen atoms are substituted by a halogen atom, a C6 to C21 aryl group, a C2 to C20 heteroaryl group, or a C7 to C21 aralkyl group, or a corresponding halogen-substituted aryl group, halogen-substituted

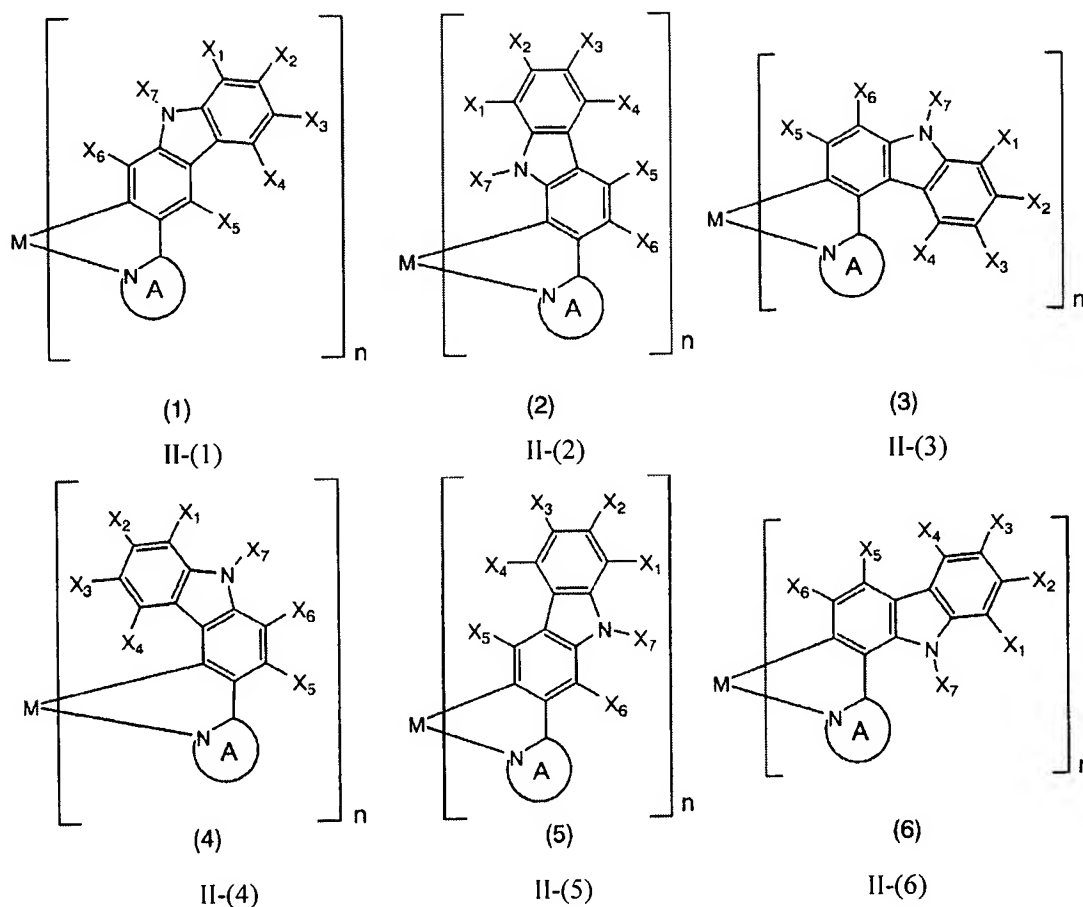
heteroaryl group, or halogen-substituted aralkyl group in which a part or all of the hydrogen atoms are substituted by a halogen atom, X_1 to X_7 may be identical to or different from each other, and ring A may have a substituent that is the same as the groups defined by X_1 to X_7)

wherein in Formulae I-(1) to I-(6) at least one of X_1 to X_7 and the substituent of ring A defined as being the same as X_1 to X_7 is a fluorine atom or a trifluoromethyl group.

Claim 3 (Original): The metal coordination compound according to Claim 2, wherein in Formulae I-(1) to I-(6) ring A is pyridine, quinoline, benzoxazole, benzothiazole, benzimidazole, benzotriazole, imidazole, pyrazole, oxazole, thiazole, triazole, benzopyrazole, or triazine, which may have a substituent that is the same as the groups defined by X_1 to X_7 .

Claim 4 (Cancelled)

Claim 5 (Withdrawn): The metal coordination compound according to Claim 1, wherein it is represented by any one of Formulae II-(1) to II-(6),

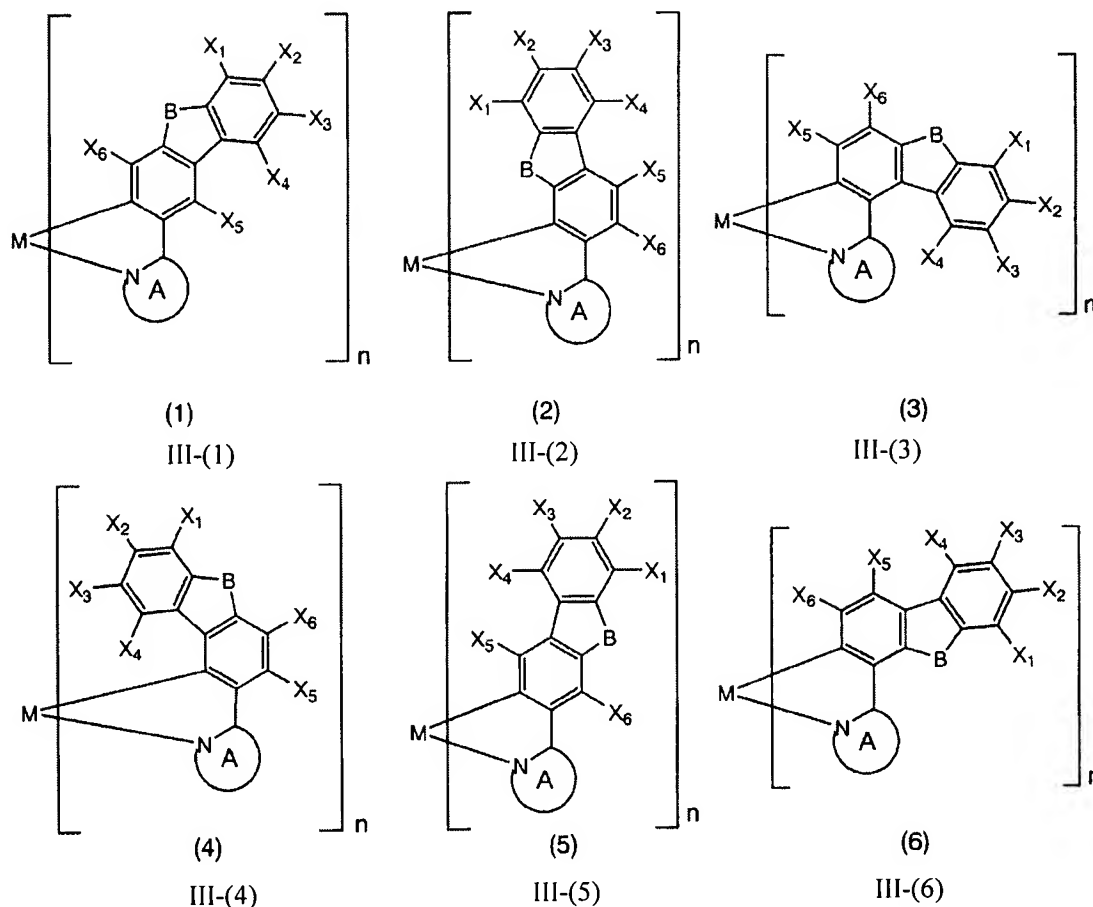


(in the formulae, M is Ir, Rh, Ru, Os, Pd, or Pt, and n is 2 or 3; when M is Ir, Rh, Ru, or Os and n is 2, another bidentate ligand further bonds to M; ring A is a cyclic compound containing a nitrogen atom bonded to M; X_1 to X_7 are independently substituents selected from the group consisting of -H, -OH, $-R^1$, $-OR^2$, $-SR^3$, $-OCOR^4$, $-COOR^5$, $-\text{Si}R^6R^7R^8$, $-\text{NH}_2$, $-\text{NHR}^9$, and $-\text{NR}^{10}R^{11}$ (here, R^1 to R^{11} represent a C1 to C22 straight-chain, cyclic, or branched alkyl group, a C6 to C21 aryl group, a C2 to C20 heteroaryl group, or a C7 to C21 aralkyl group, and R^1 to R^{11}

may be identical to or different from each other), X_1 to X_7 may be identical to or different from each other, and ring A may have a substituent that is the same as the groups defined by X_1 to X_7).

Claim 6 (Withdrawn): The metal coordination compound according to Claim 5, wherein in Formulae II-(1) to II-(6) ring A is pyridine, quinoline, benzoxazole, benzothiazole, benzimidazole, benzotriazole, imidazole, pyrazole, oxazole, thiazole, triazole, benzopyrazole, triazine, or isoquinoline, which may have a substituent that is the same as the groups defined by X_1 to X_7 .

Claim 7 (Withdrawn): The metal coordination compound according to Claim 1, wherein it is represented by any one of Formulae III-(1) to III-(6),



B : $>O$, $>S$, $>C=O$, $>SO_2$, $>CR_2$

(in the formulae, M is Ir, Rh, Ru, Os, Pd, or Pt, and \underline{n} is 2 or 3; when M is Ir, Rh, Ru, or Os and \underline{n} is 2, another bidentate ligand further bonds to M; ring A is a cyclic compound containing a nitrogen atom bonded to M; X_1 to X_6 and R are independently substituents selected from the group consisting of $-R^1$, $-OR^2$, $-SR^3$, $-OCOR^4$, $-COOR^5$, $-SiR^6R^7R^8$, and $-NR^9R^{10}$ (here, R^1 to R^{10} represent a hydrogen atom, a halogen atom, a cyano group, a nitro group, a C1 to C22 straight-chain, cyclic, or branched alkyl group or a corresponding halogen-substituted alkyl group in

which a part or all of the hydrogen atoms are substituted by a halogen atom, a C6 to C21 aryl group, a C2 to C20 heteroaryl group, or a C7 to C21 aralkyl group, or a corresponding halogen-substituted aryl group, halogen-substituted heteroaryl group, or halogen-substituted aralkyl group in which a part or all of the hydrogen atoms are substituted by a halogen atom, and R¹ to R¹⁰ may be identical to or different from each other), X₁ to X₆ may be identical to or different from each other, and ring A may have a substituent that is the same as the groups defined by X₁ to X₆).

Claim 8 (Withdrawn): The metal coordination compound according to Claim 7, wherein in Formulae III-(1) to III-(6) ring A is pyridine, quinoline, benzoxazole, benzothiazole, benzimidazole, benzotriazole, imidazole, pyrazole, oxazole, thiazole, triazole, benzopyrazole, triazine, or isoquinoline, which may have a substituent that is the same as the groups defined by X₁ to X₆.

Claim 9 (Currently amended): The metal coordination compound according to Claim 2 [[1]], wherein M is Ir.

Claim 10 (Currently amended): A polymer composition comprising the metal coordination compound according to Claim 2 [[1]] and a conjugated and/or non-conjugated polymer.

Claim 11 (Currently amended): An organic electroluminescent device fabricated using the metal coordination compound according to Claim 2_{[[1]]}.

Claim 12 (Currently amended): An organic electroluminescent device fabricated using the polymer composition according to Claim 10.